

SVQ for IT Users (ITQ) — level 2 (SCQF level 5)

F9D1 04: Spreadsheet Software 2

4 SCQF credit points at SCQF level 5

Description: This is the ability to use a software application designed to record data in rows and columns, perform calculations with numerical data and present information using charts and graphs.

Outcome	Skills and Techniques	Knowledge and Understanding
On completion of this Unit the candidate should be able to:		
1 Use a spreadsheet to enter, edit and organise numerical and other data.	<ol style="list-style-type: none">1 Enter and edit numerical and other data accurately.2 Combine and link data across worksheets.3 Store and retrieve spreadsheet files effectively, in line with local guidelines and conventions where available.	1 Identify what numerical and other information is needed in the spreadsheet and how it should be structured .
2 Select and use appropriate formulas and data analysis tools to meet requirements.	<ol style="list-style-type: none">1 Select and use a range of appropriate functions and formulas to meet calculation requirements.2 Use a range of tools and techniques to analyse and manipulate data to meet requirements.	1 Identify which tools and techniques to use to analyse and manipulate data to meet requirements.
3 Select and use tools and techniques to present and format spreadsheet information.	<ol style="list-style-type: none">1 Select and use appropriate tools and techniques to format spreadsheet cells, rows, columns and worksheets.2 Select and format an appropriate chart or graph type to display selected information.3 Select and use appropriate page layout to present and print spreadsheet information.4 Check information meets needs, using spreadsheet tools and making corrections as necessary.5 Respond appropriately to any problems with spreadsheets.	<ol style="list-style-type: none">1 Plan how to present and format spreadsheet information effectively to meet needs.2 Describe how to find errors in spreadsheet formulas.

Note: The **emboldened** items are exemplified in the Support Notes.

Evidence Requirements

Completion of a portfolio (manual, electronic or combination) to cover all of the Skills and Techniques and Knowledge and Understanding points stated above. The evidence generated should adhere to the Assessment Strategy for this award and encompass a range of evidence types.

NB: It is possible to achieve this Unit by Accreditation of Prior Achievement (APA), however, the relevant evidence must be referenced within the portfolio.

General information

This Unit equates to NOS (National Occupational Standards for IT Users 2009) code SS: Spreadsheet software level 2. It has a stated number of SCQF credit points = 4 at SCQF level 5.

Support Notes

Summary

A SCQF level 5 (ITC level 2) user can select and use a wide range of intermediate spreadsheet software tools and techniques to produce, present and check spreadsheets that are at times non-routine or unfamiliar. Any aspect that is unfamiliar may require support and advice from others.

Spreadsheet software tools and techniques will be defined as 'intermediate' because:

- ◆ the range of data entry, manipulation and outputting techniques will be at times non-routine or unfamiliar
- ◆ the tools, formulas and functions need to analyse and interpret the data requires knowledge and understanding (for example, mathematical, logical, statistical or financial)
- ◆ the user will take some responsibility for setting up or developing the structure and functionality of the spreadsheet

Examples of context: Typical examples may include — monthly expenditure and sales figures, budgets, cash flow forecasts and graphs of results.

Examples of content are given separately for highlighted text, where explanatory notes are required on terminology in the Outcomes, and do not form part of the standards. Such examples are not meant to form a prescriptive list for the purposes of assessment but rather to amplify and interpret the generic terms used in the Performance Criteria in the light of current usage of ICT systems and software. These examples are subject to change as new tools and techniques become commonplace and older ones drift out of use.

The examples given below are indicative of the learning content and are not intended to form a prescriptive list for the purpose of assessment.

Outcome 1

Enter and edit: *Insert data into single and multiple cells, clear cells, edit cell contents, replicate data, find and replace, add and delete rows and columns; use absolute and relative cell references, add data and text to a chart.*

Numerical and other information: Numbers, charts, graphs, text, *images*.

Spreadsheet structure: Spreadsheet components (eg cells, rows, columns, tabs, pages, charts, *ranges, workbooks, worksheets*), *structure, design and layout*.

Store and retrieve: Save, save as, find, open, close, *open CSV file in spreadsheet application, save spreadsheet file as CSV; templates*.

Outcome 2

Analyse and manipulate: *Totals, sub-totals and summary data; sorting and display order; lists, tables, graphs and charts; filter rows and columns; Judgment of when and how to use these methods.*

Functions and formulas: Design of formulas to meet calculation requirements; *mathematical, statistical, financial, conditional; logical functions*.

Outcome 3

Format cells: Numbers, currency, percentages, number of decimal places, font and alignment, shading and borders; *date and time formats, wrap text*.

Format rows and columns: Height, width, borders and shading, *hide, freeze*.

Format charts and graphs: **Format charts and graphs:** Chart type (eg pie chart, bar chart, single line graph, *area, column, x-y scatter, stock, radar, doughnut, surface*), title, axis titles, legend, *change chart type, move and resize chart*.

Page layout: Size, orientation, margins, *header and footer, page breaks*, page numbers, date and time, *adjust page set up for printing*.

Check spreadsheet information: Accuracy of numbers, formulas and any text; accuracy of results; suitability of charts and graphs; *reveal formulae; layout and formatting; validity and accuracy of analysis; clarity of overall spreadsheet*.

Problems with spreadsheets: Using help; sorting out errors in formulas, circular references.

Guidance on examples of evidence

Typical examples of evidence for Outcomes 1–3

Typical examples could include monthly expenditure and sales figures, budgets, cash flow forecasts and graphs of results.

To assess competence in the Knowledge and Understanding sections for all of the Outcomes a knowledge test in the form of multiple-choice questions (say 16–20 questions) or candidate statement or expert witness testimonial statements or a semi structured interview could be employed. Either one or a combination of these methods would be appropriate. If oral questioning techniques are employed it is essential to keep a record of the questions asked, together with a record in a suitable format of the candidate's responses to these for evidence purposes.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements